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IMPACT OF FOOD POLICY ON AGRICULTURAL DEVELOPMENT IN CEYLON

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Paddy is the staple food of the people in Ceylon. Of the total consumption of all the foodgrains in the Island, paddy constitutes more than 90 per cent and nearly half of this is imported. The consumption of wheat flour which is of the order of 140 thousand tons is all from imported supplies. Small quantities of other commodities like *kurakkan*, sorgham, maize, etc., which are locally produced are also being consumed. Large quantities of chillies and onions consumed in the Island are all being imported.

Ceylon had a bitter experience during World War II when consequent to enemy action and a world-wide scarcity of consumer goods, she was faced with a problem to secure the basic food for her people. The Government was forced to introduce what is known as the Internal Purchase Scheme, under which all cultivators of paddy were compulsorily required to surrender to the Government, on payment, all the paddy produced by them over and above their consumption requirements. Soon after the cessation of hostilities, the country became independent in 1947 and this changed the complexion of the economic policy. The national government was immediately seized with the problem of ameliorating the economic condition of the peasantry and making the country self-sufficient in rice—the primary food of the people.

The erstwhile Internal Purchase Scheme was thus converted into the Guaranteed Price Scheme (G.P.S.) in 1948 which besides rice included other agricultural commodities also. Table I would give an idea of the coverage under the Scheme as well as the support prices prevalent for paddy from time to time. Paddy was guaranteed at a price of Rs. 8 per bushel (equal to 46 lbs. of paddy) against the original price of Rs. 4 (subsequently raised to Rs. 6) under the Internal Purchase Scheme and purchases at this price commenced in 1948. The Commissioner for the Development of Marketing who was responsible for the implementation of this scheme, defined the objectives as

(a) to ensure to the producer fair prices and a ready market for his produce;

(b) to stimulate the production of food crops in the country ; and, thereby

(c) to replace food imports by locally produced food with self-sufficiency as the long-term goal.

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* This represents the personal views of the author.

TABLE I—GUARANTEED PRICE SCHEME—COLLECTIONS AND PRICES

Year	Total paddy production (million bushels)	G.P.S. collections (million bushels)	G.P.S. collections as per cent of total production	G.P.S. price (Rs per bushel of paddy)	Imported price (Rs per bushel of paddy)	Price of rationed rice Rs. per measure
1	2	3	4	5	6	7
1948 ..	18.7	0.466	0.25	8.0	7.88	—
1949 ..	23.1	0.518	0.22	8.0	7.79	0.36
1950 ..	22.0	0.415	0.19	8.0	7.74	0.30 (February) 0.25 (December)
1951 ..	22.0	0.524	0.24	9.0	8.15	0.25
1952 ..	28.9	1.325	0.46	12.0	11.24	0.25
1953 ..	21.9	0.332	0.15	12.0	10.30	0.70 (July) 0.55 (October)
1954 ..	31.1	3.615	11.62	12.0	9.40	0.55
1955 ..	35.7	13.405	37.55	12.0	8.10	0.50 (May)
1956 ..	27.5	9.728	35.37	12.0	7.80	0.40 (May)
1957 ..	31.3	13.258	42.36	12.0	6.40	0.40
1958 ..	36.6	16.262	44.43	12.0	5.70	0.35 (June)
1959 ..	36.4	16.642	45.72	12.0	7.70	0.25 (June 1st measure) 0.45 (June 2nd measure)
1960 ..	43.0	20.835	48.45	12.0	6.40	0.45 (April both measures)
1961 ..	43.2	22.400	51.85	12.0	6.10	0.25
1962 ..	48.1	27.035	56.21	12.0	6.70	0.25
1963 ..	49.2	27.760	56.42	12.0	6.20	0.25
1964 ..	50.5	29.176	57.77	12.0		0.25

Source : Reports of the Commissioner of Agrarian Services and the Food Commissioner.

The same circular mentioned that there is no doubt that this is the surest method of bettering the conditions of the rural population so that the guaranteed price scheme probably was intended to play the role of an instrument of social amelioration as well.

Soon after the inauguration of this scheme, Co-operative Agricultural Produce Sales and Supplies Societies were made the agents of the administering authority to purchase paddy from the producer. These societies were paid a commission of 4 per cent of the value of each bushel of paddy and the cost of transporting paddy from the society premises to the government stores which were at the beginning open only at Colombo and Anuradhapura.

Introduction of price support measures as a means to increase the production of the commodity concerned is an accepted policy all over the world. The cultivator is invariably guaranteed his cost of cultivation in all such cases so that he does not suffer a loss when ultimately his crop comes to the market. In the case of Ceylon, however, as no information was available regarding the cost of production in the country, it was considered that the imported price of rice should be taken as indicative of the level at which the local producer should be guaranteed.

Obviously, international prices fluctuate very widely because of a number of external factors which may or may not have any bearing on the cost of production of a commodity even in the country of its origin. Unfortunately, rice met the same fate. The price of rice in the international market went on increasing in the subsequent years so that it had crossed Rs. 11 per bushel by 1952. In keeping with the accepted policy of the government the G.P.S. price of paddy in the country was also increased every year (Table I).

It is very interesting to note that the guaranteed price for paddy was increased to Rs. 12 per bushel as a result of an increase in the international price, but when after 1952 the international price came down and is quoted at about Rs. 6.50 per bushel in the recent years the guaranteed price has remained constant at Rs. 12.[1]

Closely linked with the guaranteed price is another scheme of the Government which relates to the supply of rice to the consumer under an Island-wide rationing scheme. Every citizen in the country above the age of one is entitled to a ration of two measures of rice equivalent to four pounds every week and the present ration price is twenty-five cents a measure. Incidentally this is the minimum retail price at which the consumer gets his supplies of rice in the world.

Before we go over to the question of the real effect of the guaranteed price scheme on the fulfilment of its primary objective laid before it, it would be necessary to make a passing remark regarding the impact of this scheme on the finances of the country. Some useful data in this respect for the past few years have been collected and are presented in Table II.

TABLE II—BURDEN OF PADDY SUBSIDIES ON THE CEYLON ECONOMY

(in million Rs.)

	1959	1960	1961	1962	1963	1964
1. Producer subsidy	108.6	133.9	163.6	180.9	175.1	172.9
2. Consumer subsidy ..	133.4	170.8	207.7	234.5	240.3	265.7
3. Fertilizer subsidy	2.8	2.4	2.8	4.2	5.7	8.0
4. Seed subsidy	0.4	0.3	0.3	0.3	0.3	0.3†
5. Total	245.2	307.4	374.4	419.9	421.4	446.9
6. Total revenues of the State*	1330.4	1403.8	1513.9	1627.3	1578.8	1757.6
7. Col. 5 as percentage of Col. 6	18.4	21.9	24.7	25.8	26.7	25.4
8. Credit Extension†† ..	18.5	13.6	11.4	12.6	10.3	34.6

† Estimated expenditure.

* Corresponds to financial years 1958-59 and so on.

†† Includes loans given on other crops of which the magnitude is very small.

The subsidies which alone totalled a sum of Rs. 447 million were more than 25 per cent of the total revenues of the State. If we add to this the recurrent expenditure of the Department of Agriculture, Agrarian Services, Food Commissioner, Irrigation, Land Development and Land Commissioner which is more than Rs. 150 million, this would mean that close to one-third of the revenues of the State are being spent mostly on paddy. Another sum of nearly Rs. 80 million is invested every year on irrigation and land development which again is primarily intended to benefit the paddy producer. A sum of Rs. 5 million is also being invested for the development of paddy alone. All this would represent nearly 12 per cent of the total capital budget (about Rs. 700 million) of the country. Along with this, credit facilities extended to the paddy cultivator have also increased in recent years by more than 100 per cent.

1. This is the maximum price next only to Japan all over the world.

With every increase in the production of paddy and improvement in the efficiency of the working of the scheme, pressure on the financial resources of the country is increasing year by year. When the total rice consumption in the Island is nearly 1.2 million tons (1963) and not more than half is being imported, the total amount of the producer as well as the consumer subsidies works out to about Rs. 424 million which represents about 23 per cent of the total revenues of the State. The total production of paddy in the Island in 1964 was 50 million bushels of which about 30 million bushels were being purchased under the G.P.S. If the Government has a target of reaching self-sufficiency say by 1980, which it should have, when the present population of about 11 millions will cross 16 millions, the total requirements of paddy at the present rate of consumption will be nearly 160 million bushels. Assuming two-third of this being collected under the G.P.S. and supplied to the consumer under the rationing scheme, the Government will be required to allocate over Rs. 1,100 million for the operation of the two schemes only. How far this is feasible is a difficult question to answer when total revenues of the State at present are less than Rs. 2,000 million.

All this calls for a serious thinking with regard to an appraisal of the working of the scheme during the past decade or so and how far it has helped to achieve the objectives set before it.

One of the primary objectives and legitimately so, of the guaranteed price scheme, is to increase the production of paddy and substitute imports by locally produced rice. Ignoring the first few years of the working of the scheme, we find that with 1952 as base, when the price of paddy was raised to the present level of Rs. 12 per bushel, paddy production in the Island had gone up by 70 per cent in 1963. It might be rather difficult to apportion the contribution of G.P.S. towards this increase which if not remarkable, can be considered as quite reasonable.

Incentives provided under the guaranteed price scheme can contribute towards increased production both by bringing additional areas under cultivation as well as increasing the yield per acre. In so far as area is concerned, we find (Table III) that there was an increase of 266 thousand acres in the aswedumised[2] area during this period. As against this, additional irrigation facilities were provided for a gross irrigated area of 346 thousand acres. In the absence of data regarding the net irrigated area in the country, it might be difficult to say whether or not the increase in the aswedumised area is totally the result of additional irrigated area. But since in the country as a whole, the double cropping ratio is of the order of 30 per cent, it would be a safe assumption that the net irrigated area added during this period would not in any case be less than 266 thousand acres which is the total addition to the aswedumised area.

Since all the aswedumised land does not give two crops, there has always been a big gap in the cultivated acreage, both under *Maha* and *Yala*.[3] The total addition to the cultivated acreage works out to 400 thousand acres of which only 55 thousand acres, representing rain-fed paddy, would appear to have been added as a result of the efforts of the cultivator.

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2. Area prepared for cultivation. What is actually cultivated is always less than the aswedumised.

3. *Maha* and *Yala* are the two crop seasons for paddy ; *Maha* representing the rainy season.

TABLE III—ASWEDUMISED, CULTIVATED AND HARVESTED AREA UNDER PADDY : 1952 AND 1963

Item	1952	1963	Percentage increase between 1952 and 1963	
	(thousand acres)			
Aswedumised area	964	1230	266	27.6
Cultivated area :				
Maha	738	1000	262	35.5
Yala	424	562	138	32.6
Total	1162	1562	400	34.4
Cultivated : Irrigated :				
Maha	355	566	211	59.4
Yala	233	368	135	57.9
Total	588	934	346	58.8
Rain-fed				
Maha	383	435	52	13.6
Yala	190	193	3	1.6
Total	573	628	55	9.6
Net Harvested :				
Irrigated				
Maha	293	474	181	61.8
Yala	188	308	120	63.8
Total	481	782	301	62.6
Rain-fed				
Maha	302	360	58	19.2
Yala	153	155	2	1.3
Total	455	515	60	13.2
Total Net Harvested	936	1297	361	38.6

This would indicate that but for this annual addition of 5 thousand acres, the cultivator hardly made any effort of his own to increase the area under paddy. Since all the additional irrigation facilities are provided to him under Government patronage and at Government expense,[4] he simply relied on the Government efforts to provide new areas for him for cultivation which he would have possibly done even in the absence of any other special incentive.

It would also be interesting to observe that of the total irrigated area of 365.9 thousand acres under major schemes and 370.4 thousand acres under minor schemes in 1963-64, as much as 75.8 thousand acres in *Maha* and 139.7 thousand acres in *Yala* under major irrigation and 87.7 thousand acres and 228.7 thousand acres respectively under minor irrigation were not cultivated. May be, portions of this irrigated land could not be cultivated because water might not be available for two crops. But what appears to be a rather sad story is that more than 160 thousand acres have remained uncultivated during *Maha* alone when besides the irrigation facilities provided, there is more than enough rainfall to sustain a crop.

4. The Government is spending nearly Rs. 14 thousand to settle each colonist on his irrigated allotment and all this is a free gift.

Besides irrigation, there are other factors like shortage of capital and labour, both human and animal, which might be standing in the way of the cultivator to bring this unutilized area under cultivation. But what is pertinent to note is that in spite of the expanded credit facilities made available to him and other incentives provided for paddy, he has not made any effort of his own to reduce this gap.

Coming next to productivity we find that on an all-Island-wide basis, yield per acre increased by 23 per cent during the period of 11 years—1952 to 1963. This gives an annual growth rate of 2.1 per cent. One would wonder how much of this could be the result of G.P.S. incentive when it is realised that according to the data published by the F.A.O., the annual increase of paddy yields in most of the Asian countries during the last ten years had been higher than Ceylon (Table IV). The only countries which fall below the level of Ceylon are Burma, Philippines and Malaya. All three of them are no doubt important in the production of paddy, but in the absence of reliable information, it would be difficult to find out how far the data presented are correct and if correct, what have been the reasons responsible for the present state of affairs in those countries.

TABLE IV—RICE (PADDY) YIELD IN SOME SELECTED COUNTRIES IN SOUTH-EAST ASIA

	Average 1948-49—1952-53 (100 kg./hectare)	1963-64	Percentage increase
Burma	14.6	15.6	6.8
Cambodia	9.8	12.0	22.4
China, Taiwan	22.1	35.0	58.4
India	11.1	15.4	38.7
Japan	42.5	52.4	23.3
Korea, Rep. of	27.5	32.3	17.5
Malaysia			
Malaya	20.1	22.9	13.9
Sabab	12.1	20.2	60.3
Sarawak	4.9	9.6	95.9
Pakistan	13.8	17.2	24.6
Philippines	11.8	12.2	3.4
Saudi Arabia	10.5	28.5	171.4
Thailand	13.1	15.9	21.4
Viet Nam, Rep. of	13.6	21.0	54.4

Source : F. A. O. Year Book—Production 1964 (1965).

Conditions for the growing of paddy in Ceylon are quite similar to those in some of the southern States of India. According to a recent study,[5] a linear annual growth rate of paddy productivity at 2.31 per cent was calculated for Madras, 3.39 per cent for Mysore and 3.75 per cent for Kerala, during the period 1952-53 to 1961-62. These three States in India have been quoted for comparison because the agro-climatic conditions in these States are similar to those in Ceylon and yields (about 2,000 kgs. per hectare for Ceylon) are also same in the same region.

5. Growth Rates of Agricultural Production (All-India and States), Ministry of Food and Agriculture, Government of India, 1964.

While comparing yield data for Ceylon with other countries, we must also take into consideration the fact that the irrigated area under paddy in Ceylon has increased by more than 60 per cent during the period under discussion and nearly 70 per cent of the cultivated area under paddy is provided with irrigation facilities. A major portion of the remaining area has also sufficient rain to enable a good crop of paddy during *Maha*. This should normally create conditions under which it should be rather easy for the cultivator to take advantage of the natural facilities and obtain higher yields as compared to his counterparts in the other countries.

In other parts of the world, the cultivator is not eligible for incentives at the scale being provided in Ceylon. An Indian cultivator, *e.g.*, has to pay the full price (or even a bit more) than the imported price for the fertilizers consumed by him against a 50 per cent subsidy in Ceylon. The Ceylon cultivator does not pay much as irrigation charges as compared to his Indian counterpart and irrigation facilities in India are available for only 44.5 million acres out of a total of 86 million acres under paddy. There is no crop insurance scheme available for the Indian cultivator. The expanded credit facilities for the Ceylon cultivator ensuring him to make full use of the improved methods of cultivation are a unique feature in these schemes.

On the basis of an analysis of the Island as a whole, it would thus appear to be rather difficult to come to a positive conclusion as to the contribution of G.P.S. towards an increase in paddy production.

A study of six important districts (Table V) which produce more than one-third of the total paddy in the Island and contribute more than half towards G.P.S. collections might then help to form an idea of the contribution of G.P.S. towards the increased production of paddy.

TABLE V—PADDY STATISTICS FOR SELECTED DISTRICTS IN CEYLON

Districts	Production 1964	G.P.S. collections 1964 (thousand bushels)	G.P.S. collections as percentage of total	Percentage increase in yield during 1952-64		Fertilizer used per acre sown (lbs.)
				Maha	*Yala*	
1	2	3	4	5	6	7
Hambantota	2195	1877	86	6	9	87
Batticaloa	2607	1634	63	15*	2*	71
Vavuniya	1656	1536	92	7	19	34
Mannar	1292	1063	82	32	21	99
Amparai	4148	4589	111†	25*	6*	175
Trincomalee	1719	1826	106†	5	14	42
Polonnaruwa	4204	3312	79	34**	17**	82

* Increase over the common yield of 1952.

** Increase over 1953.

† The reason for this situation where the G.P.S. collections are more than the production may be due to the fact that no estimates of paddy production are being made district-wise. The calculations made in this table are on the basis of all-Island method which is certainly not correct for each district.

Major portion of the paddy produced in these districts goes to the G.P.S. and the average for them works out to nearly 90 per cent. Yield increase per acre over a period of 12 years (1952-64) for the two seasons separately (columns 5 and 6) depicts a rather dismal picture. Against an all-Island increase of 25 and 27 per cent respectively, in the two seasons during the period under discussion, only two districts from the six indicate little higher increases and that also during one season only.

District Polonnaruwa which shows a maximum increase of 34 per cent is actually one of those where ideal conditions exist for the production of paddy. A comparison for a shorter period indicates that the acre yield during *Maha* 1964 is more or less the same as in 1958 and has so far not been able to catch up with its achievements during 1959. Practically same is the position for *Yala* where 1958 or even 1959 level has not so far been achieved.

Fertilizer consumption per sown acre (excluding district Amparai) is less than 100 lbs. Of this, ammonium sulphate will be about 80 lbs., giving not more than 16 lbs. of nitrogen—nearly one-third the recommended dose. Fertilizer issued to district Amparai during 1964 increased nearly three times as compared to the previous year. Since per acre yields showed only a slight increase and the present level is nearly the same as the all-Island average, it can be safely assumed that a major portion of the fertilizer issued under the subsidy scheme has been used elsewhere. This district has, therefore, to be ignored in this discussion.

If after 12 years of the working of the G.P.S., even these important districts showed such a poor result, we would not perhaps be far wrong to conclude that the G.P.S. has miserably failed to achieve its objective of increasing paddy production. If at all, it might have served as a disincentive. There is otherwise no reason why a cultivator in Polonnaruwa, for example, should not reap a rich harvest of nearly 70 bushels as against the present 55 bushels or so just by using additional fertilizer valued at Rs. 6 only as shown by the F.A.O. Soil Fertility Survey. Too much of 'spoon feeding' has probably made the Ceylon cultivator lazy. He has at the same time refused to increase the production of other subsidiary food crops like chillies, onions and pulses—all of which have also a guaranteed price—as the imports of all of them are simultaneously increasing every year. The G.P.S. would then appear to have not only harmed the interest of paddy, but practically the whole of the peasant agriculture.